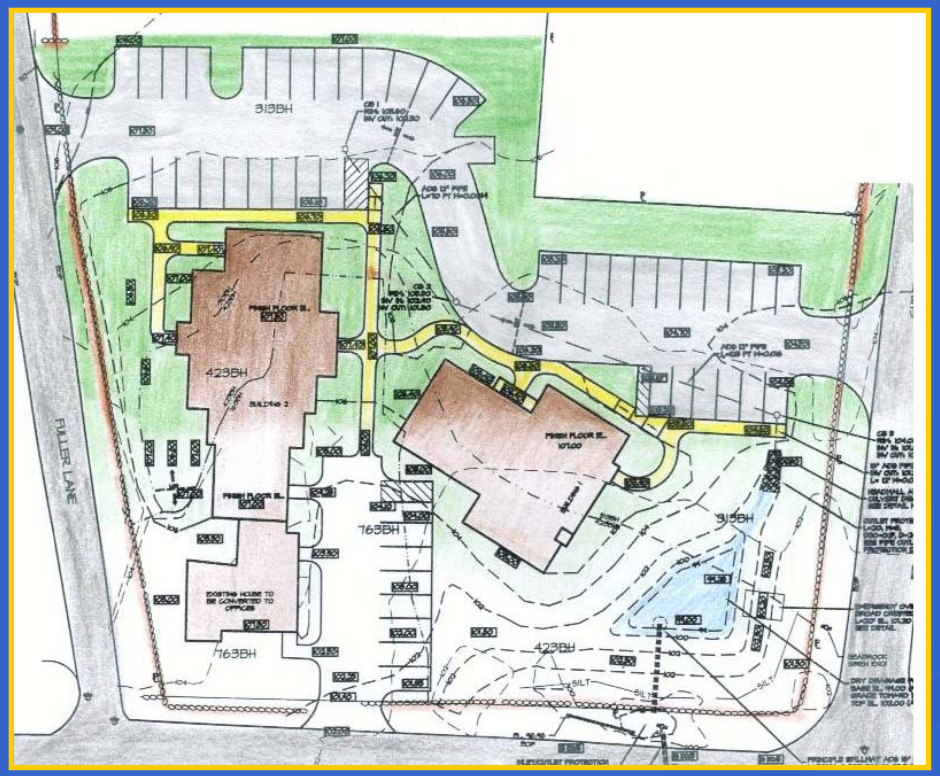
Plan Reading and Analysis

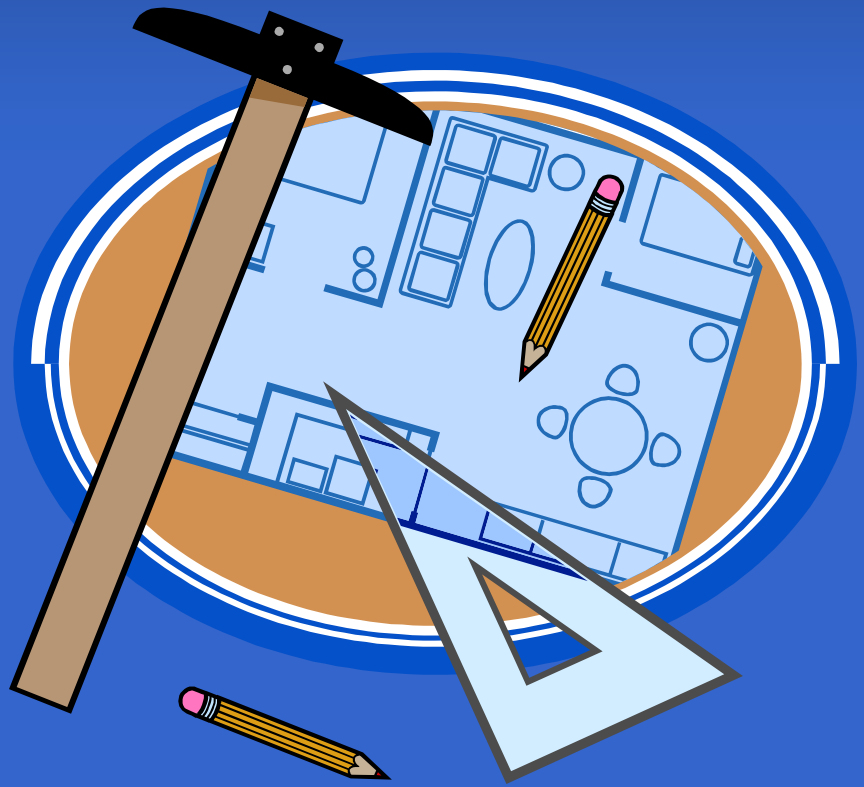
Educational Workshop for
Planners and Volunteer Boards

Sylvia von Aulock, Town Planner
Town of Exeter, New Hampshire

Reading Two Dimensional Plans in a Three D. World



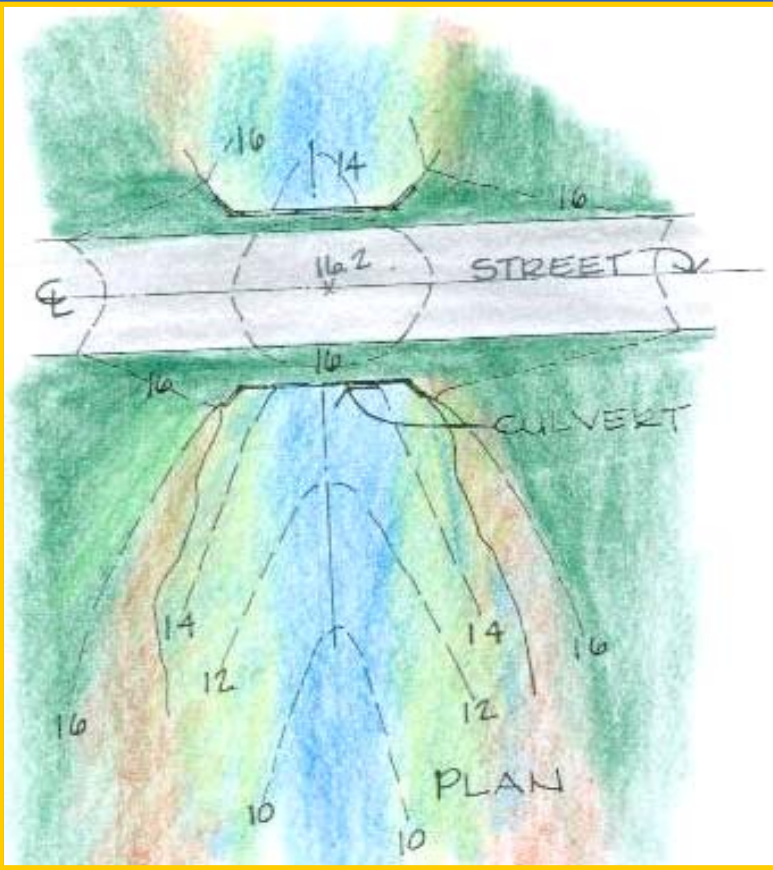
Learning to Read Plans



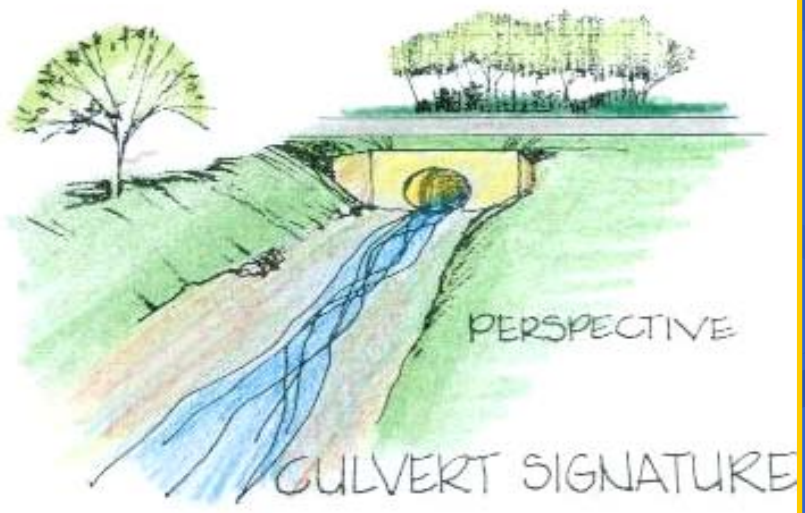
FAMILIARIZE YOURSELF WITH

1. Plan Perspective
2. Graphic Symbols
3. Engineering Terms
4. 3 dim. into 2 dim.
5. Good design practices

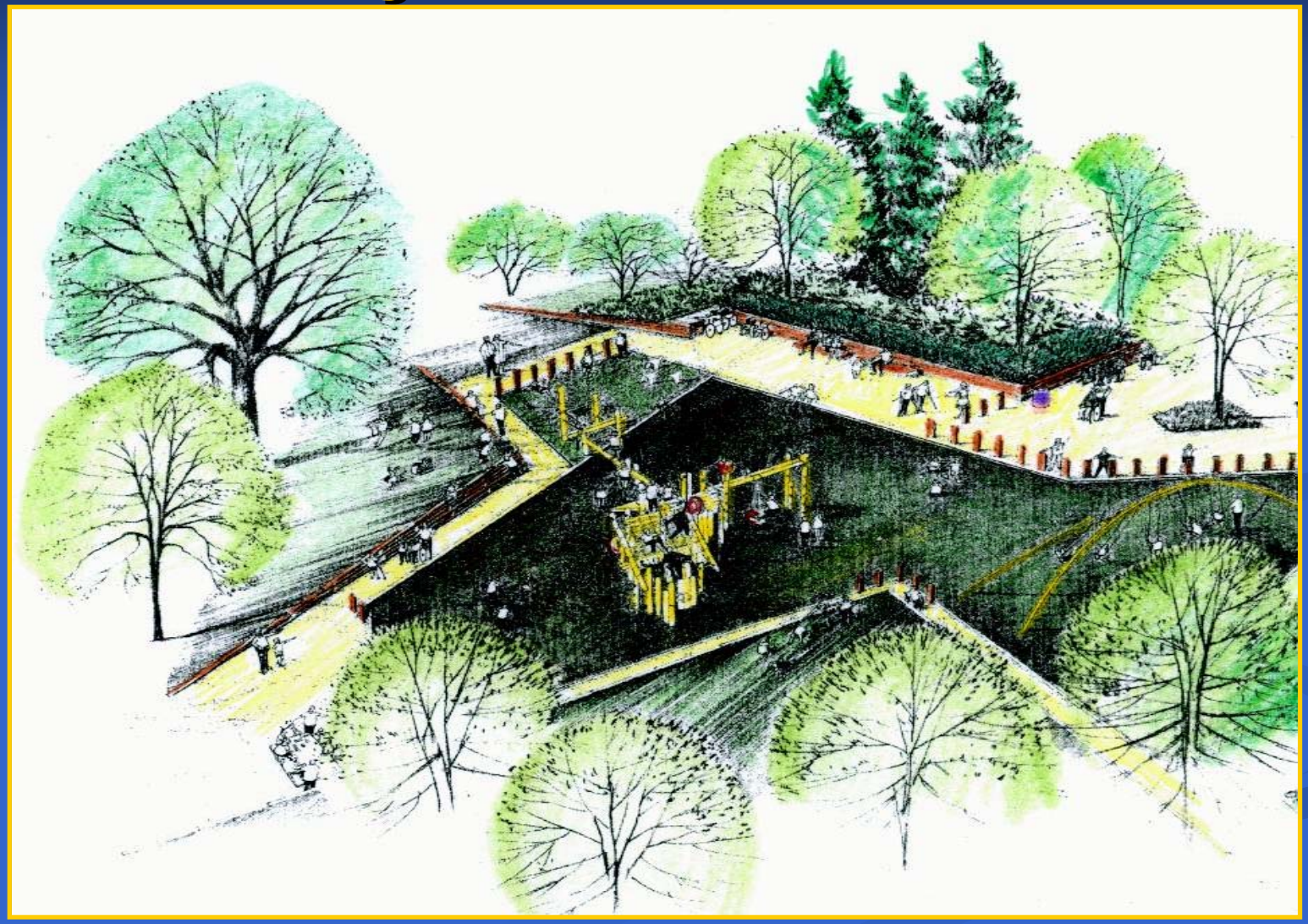
Plan Perspective



- Birds Eye View
- Cross Section



Birds Eye View



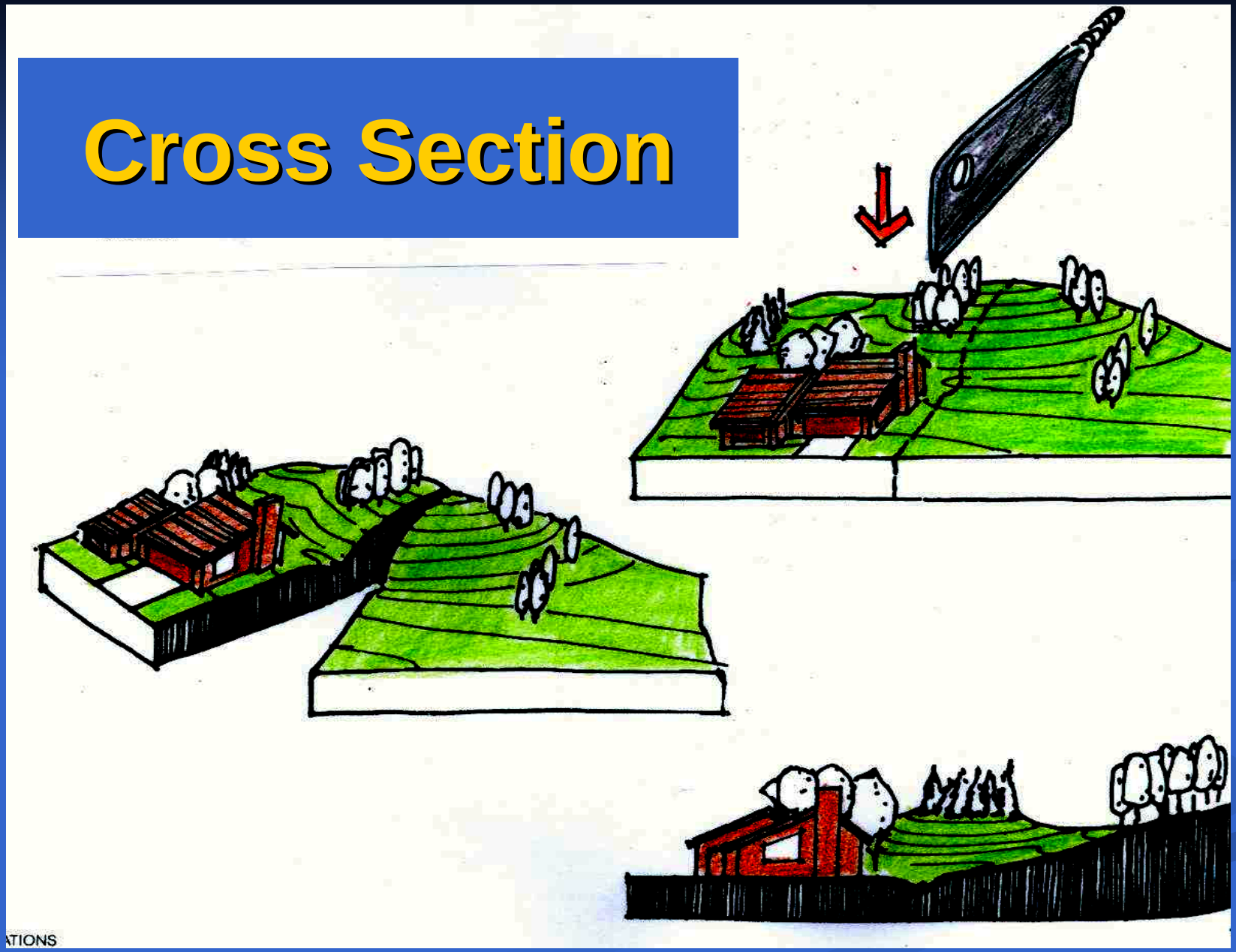
Open Space Subdivision

Lots, road, sidewalk, homes, open space

Site Plan Review

Scale of cleared area, buffers, road circulation

Cross Section



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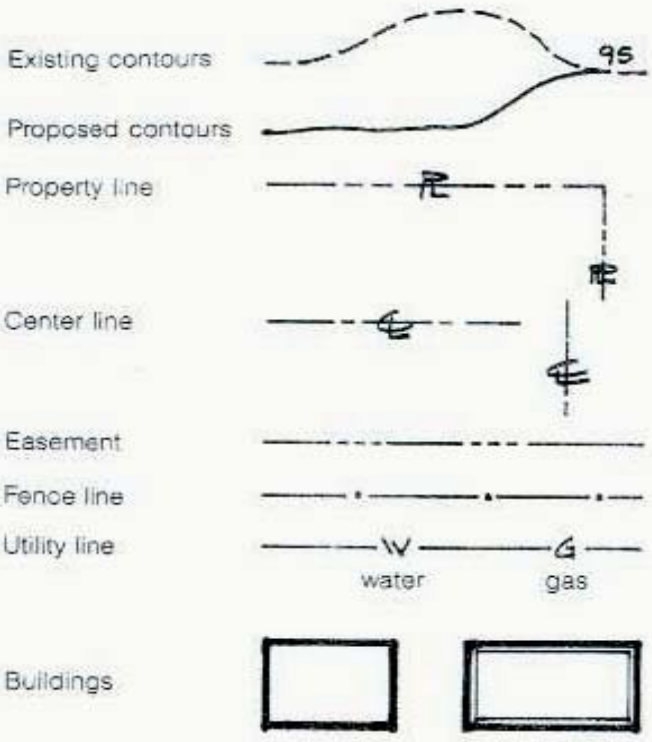
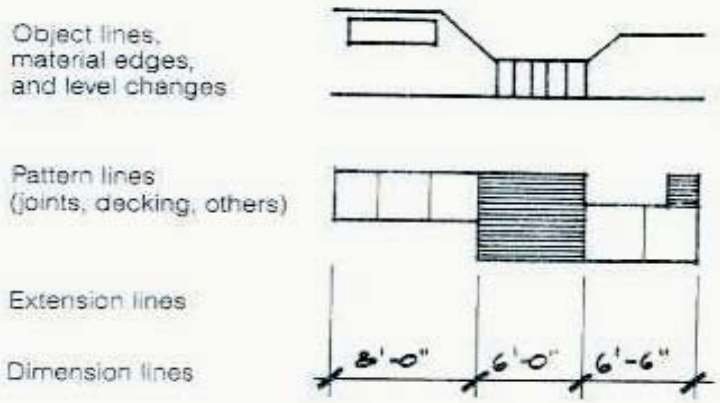
Graphic Symbols

Conventional Symbols and Line Weights for Landscape Working Drawings

Line Symbols (construction plans)





Point Symbols (site plans)

Engineering Terms

- Locus Map, Scale,North Arrow
- Existing Conditions, Contour Lines, HISS Map
- Setbacks: yard, wetland, etc
- Detention Pond, Swale, Culvert, Headwall, Rip-Rap
- ROW, Road Centerline

Let's Go On A Site Visit

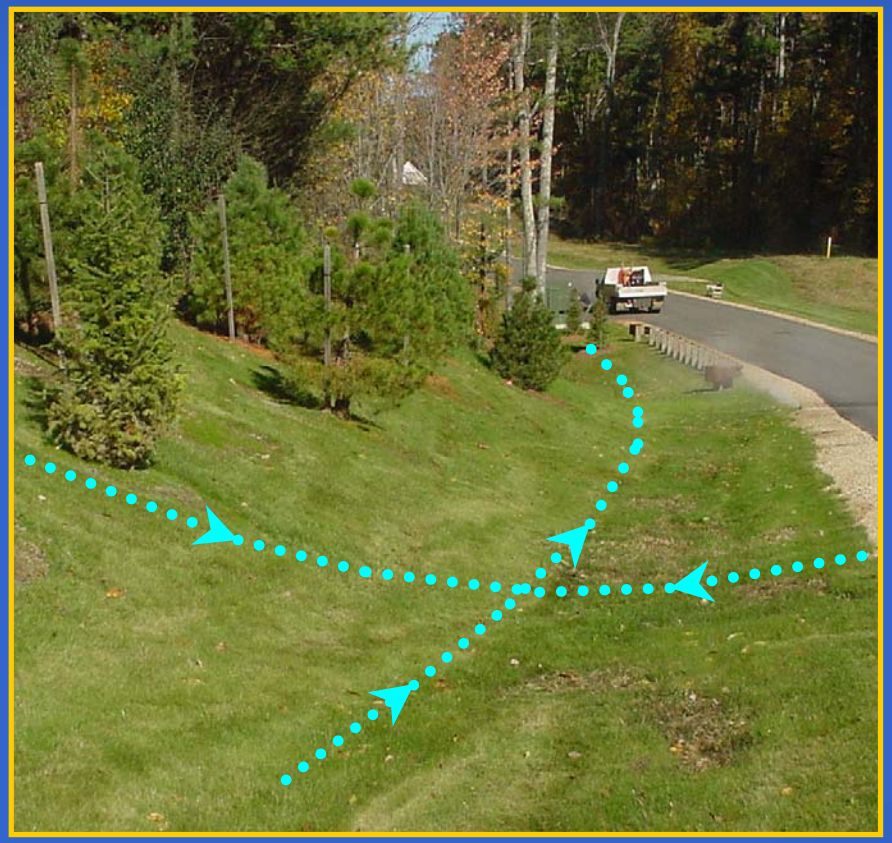
Boundaries, Flagging and Stakes

Underground Utilities

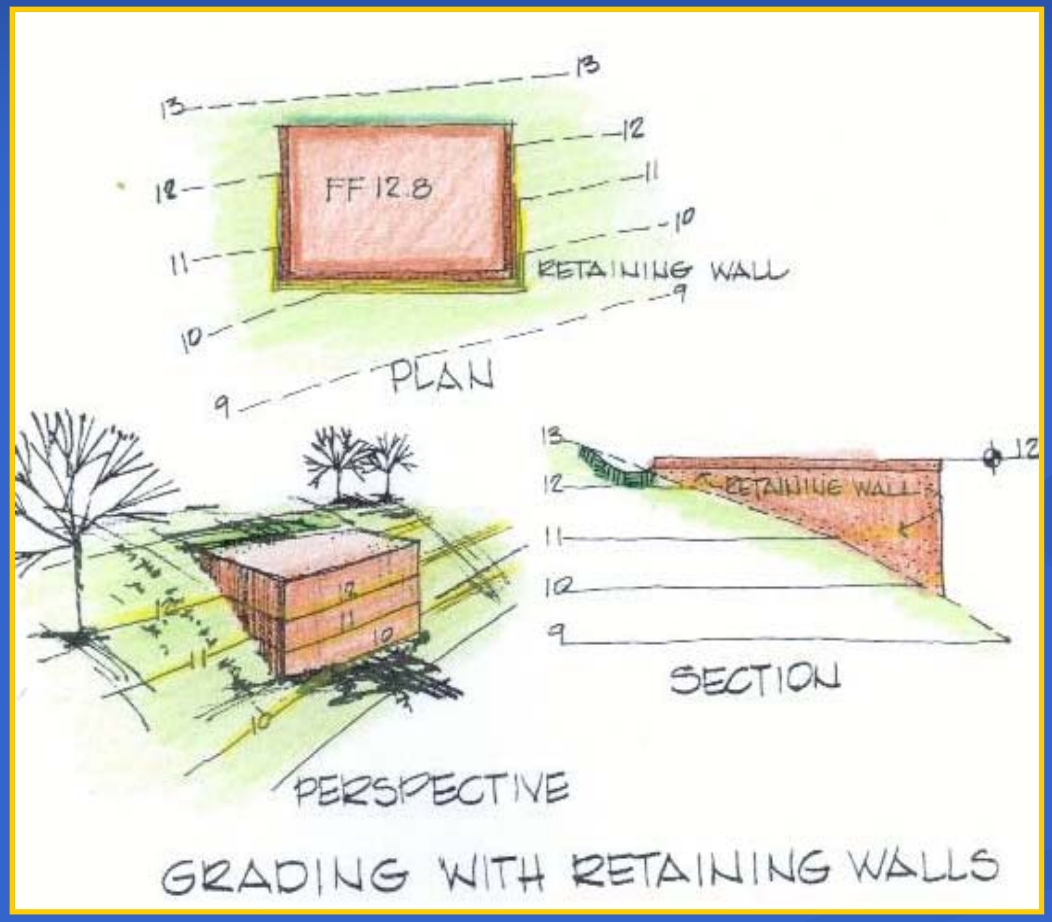
- Electrical
- Telephone & Cable
- Gas
- Water
- Sewer
- Fire Cistern
- Drainage
- Irrigation

Grading, Drainage and Percent Slopes

3 to 1, 2 to 1, Road Grade, Side Slopes, etc.



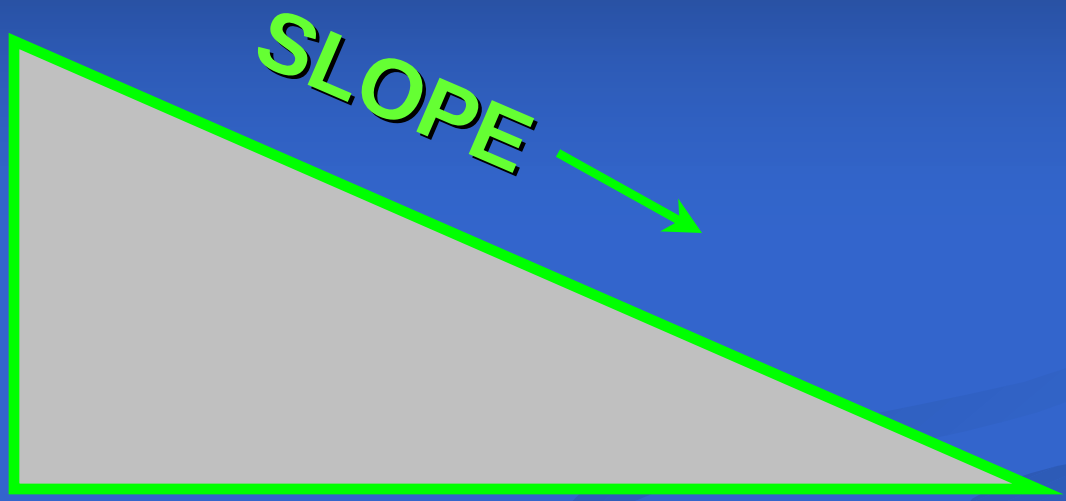
Grading Basics



- Contour lines represent a specific elevation typically above sea level
- The elevation along the line remains constant, therefore, contour lines never cross.

Slope Equation

Rise
(height difference between contours)

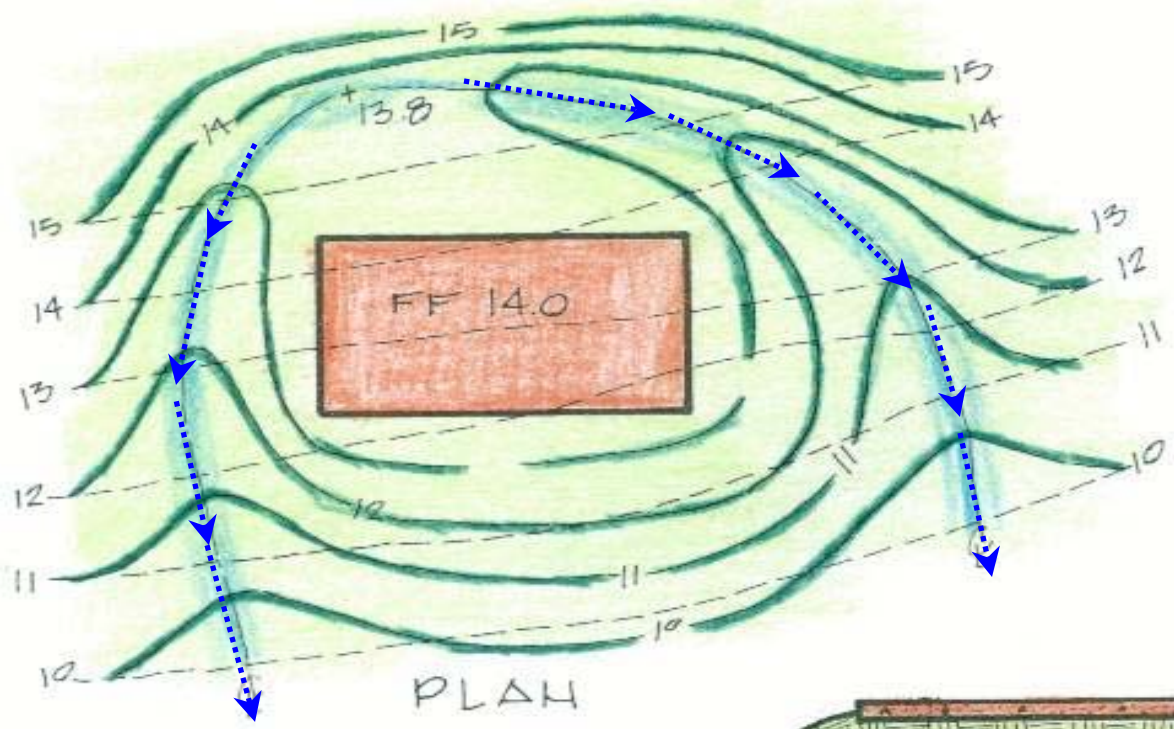


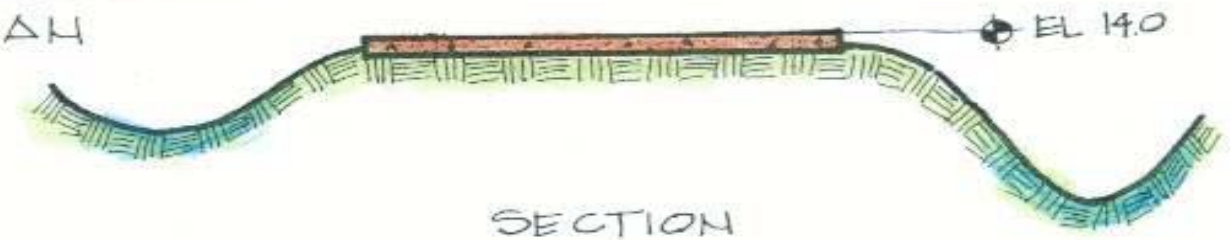
Run (Distance between contours)

Rise/Run = Slope or % grade

Ex: 2 ft/10 ft = .2 or 20 % slope

Swale Signature

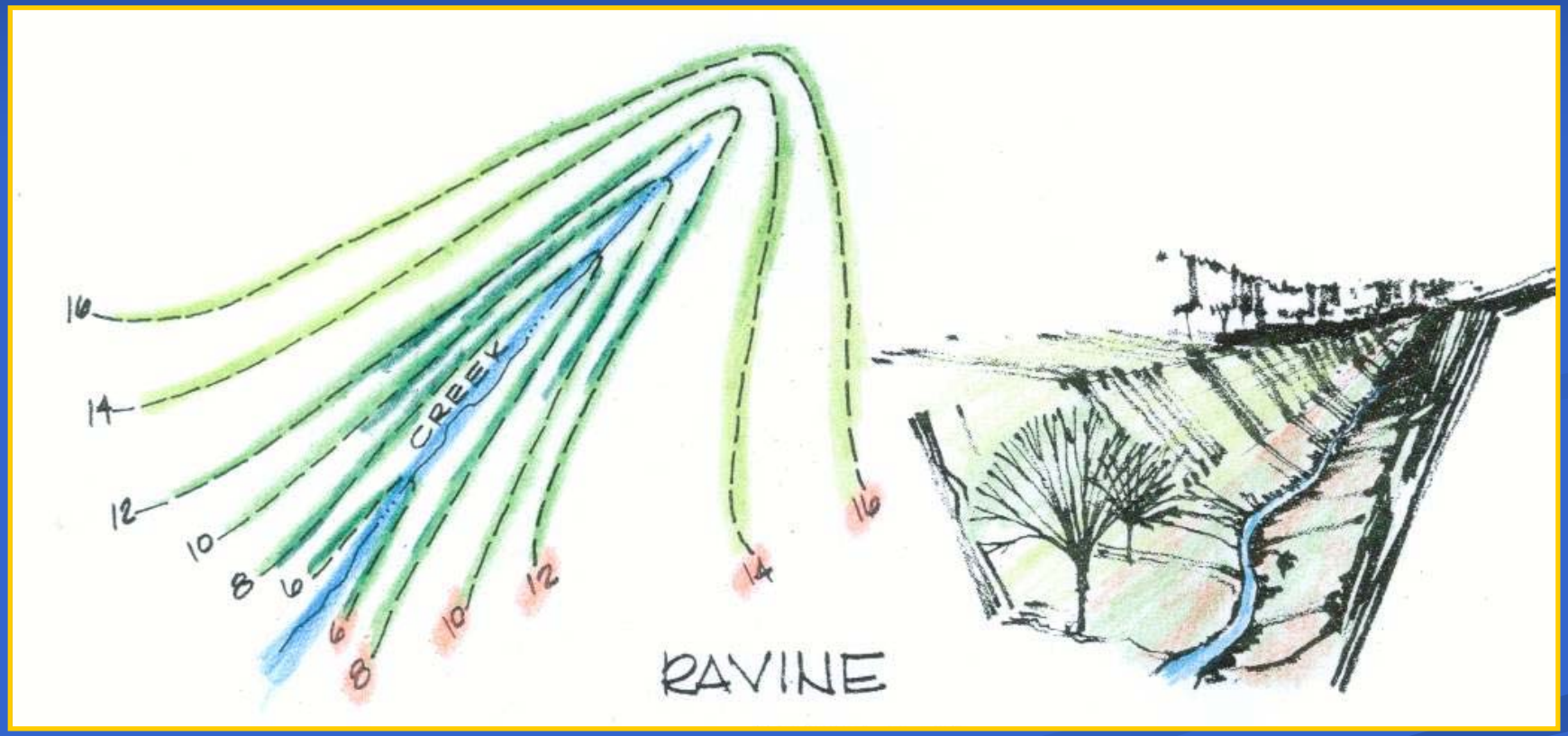




SWALE TRANSITION AROUND A SLAB

- Water flows downhill
- Swales point uphill

Typical Ravine

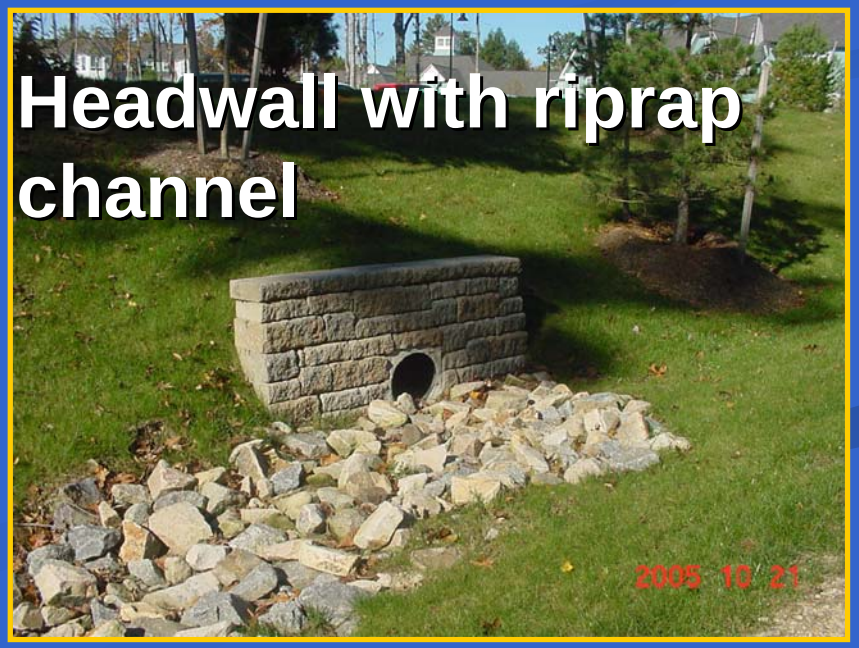


DRAINAGE & EROSION CONTROL

Gravel Slope

Grass-lined Swale

Headwall with riprap channel



Detention Ponds

Retaining Walls:

Field Constructed and Designed

Landscaping

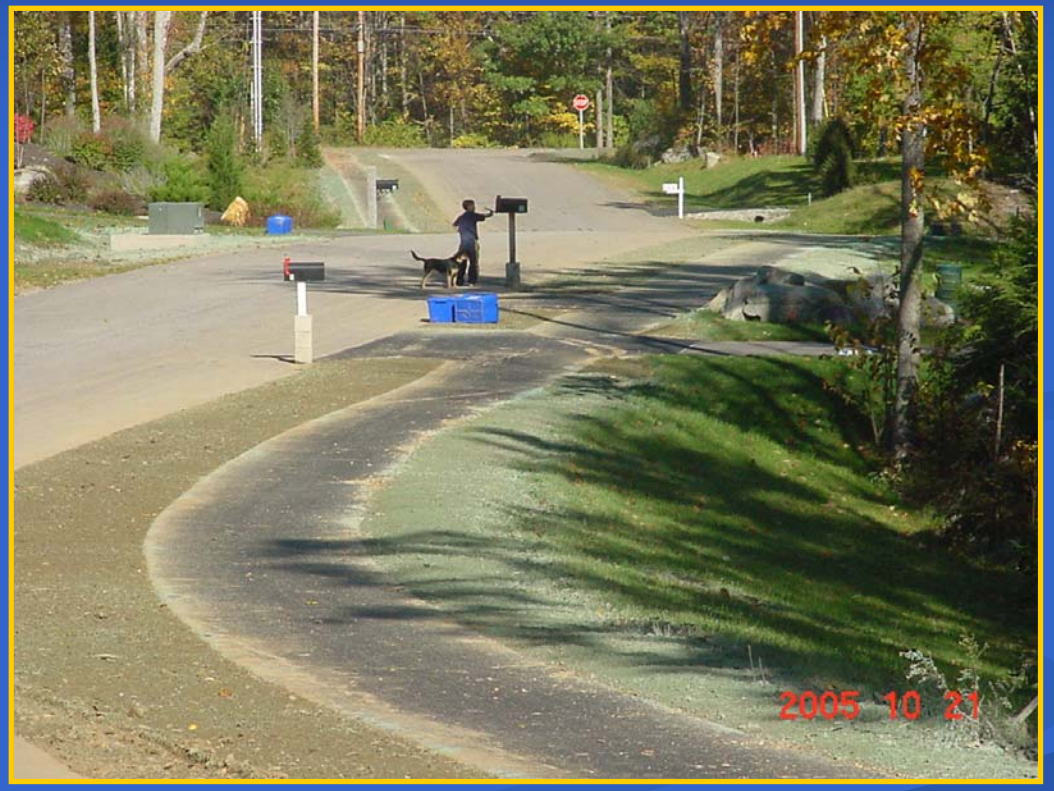
- Entryways
- Parking lots
- Roads
- Cul-de-sacs
- Berms/Screens
- Buffers

Berms and Buffers

Screens

- Dumpsters
- Commercial/ residential mutual boundaries
- Outdoor storage
- Electrical Systems
- “Undesirable neighbors”

Sidewalks and Curbing



HOMEWORK

1. GO OUT ON SITE AND SEE WHAT YOU'VE APPROVED.
2. COMPARE WHAT'S ON THE PLANS TO WHAT'S BEEN BUILT.
3. INVOLVE YOUR SITE INSPECTOR OR OTHER BOARD MEMBERS.
4. CHANGE YOUR REGULATIONS AND/OR THE WAY YOUR BOARD DOES BUSINESS IF YOU DON'T LIKE WHAT YOU SEE.

Homework #5
Color Your Plans

Ahhhhhhhhaaaaaa,
Now I know what these plans are proposing ! ! !